



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Howitt, from 1845 to 1862. Presented by A. Petermann. Admiralty Charts, 12 in number. Ordnance Maps, 223 sheets, and 21 Area Books.

The following Papers were read :—

1. *On the Geography and Climate of India, in reference to the best Site for a Capital.* By the Hon. GEORGE CAMPBELL, of the Indian Civil Service.

(Extracts.)

IF it be conceded that a new capital is wanted, and if there be a pretty general agreement on the most essential requisites for a European capital in India, it only remains to go forth, map in hand, and try to find a suitable place. I have for many years had occasion to turn my attention to the collection of facts regarding the present condition of India, and have continued that practice till it has become a habit of my life. I have made the round of all the British Provinces. It has been my fortune to be employed in widely different parts of India, and thus to have acquired a personal familiarity with at least four of the great Administrative divisions.

The following are the points especially to be kept in view in selecting the site for the capital :—

1. It should be as far as possible central, geographically and politically, and easily accessible from the different parts of India.
2. It should be within easy reach of the sea, but not so near as to be exposed to danger of attack from the sea; *ceteris paribus*, that coast would be preferable from which there is the most direct and rapid communication with Europe.
3. The climate should be temperate, and, with such aid as local surroundings may afford, tolerable throughout the seven or eight warm months of the year. At the same time it should not be too cold, damp, or rainy, nor unfitted for native constitutions at that season.
4. The site should be sufficiently roomy, should afford space for some European settlement, and should possess such amenities in itself and in the neighbourhood as might be expected to attract settlers, schools, &c.
5. It should be within reach of the influences of the public opinion of a great European and civilised native community, engaged in practical business.

Among the requisites are some which must be considered, to a great degree, obligatory, and without a tolerable mark in which no candidate can be passed. These are, I think, climate and nearness to the sea, and perhaps also the immediate proximity of a great

public opinion. If I am right as regards these obligatory conditions, our inquiry might be narrowed much. It might probably be assumed that no place within fifty miles of the sea will answer the purpose. We should then but have to take a strip round the Peninsula, ranging from 50 to 150 or 200 miles from the sea, and to see if we can find a good climate in that space. If, again, it be admitted that it is necessary to be in easy communication with and within the immediate influence of one of the present great centres of Indian business and civilisation, the question is much farther narrowed, and becomes simply this, Is there within a few hours' journey of Calcutta or of Bombay a place suited by climate and position for the new capital? We know that there is no such place near Calcutta. Therefore we come to the still more narrow question, Is there such a place within reach of Bombay, within a couple of hundred miles of Bombay, on one of the main lines of railway diverging from that place? In short, is there any suitable site in the high country which exists immediately above Bombay?

But I propose to take a wider survey of the whole country, and fairly to compare the advantages and disadvantages of different places in their various aspects.

I can answer for myself that though I have taken a good deal of trouble in the way of inquiry, I never fully realised the character of the countries which I had not seen till I did see them. Even as regards ordinary geography, I once imagined that a low plain extended to the south of the Neilgherries, through which the Madras Railway ran to the opposite coast, and was astonished to find myself running through a picturesque hilly country, 1500 feet above the sea, on a line abounding in steep gradients and sharp curves. I believed, too, I confess, that the Concan was a flat country between the ghats and the sea, a sort of Indian pontine marshes, and that the Nagpore territory was "otherwise called the valley of Berar." On the other hand, I never knew an intelligent Madras or Bombay man who did not imagine Rohilkund to be a delightfully hilly country. My impression, then, on the whole subject is, that though the amount of knowledge regarding every part of India is vast, it wants putting together; and my attempt is merely in a rough way to put together the most salient points of our knowledge, so far as regards my present subject.

It is probably unnecessary to say that India is on the land side shut out and walled off from the rest of the world by the system of great mountains which extend in a curve approaching to a semi-circle from Kurrachee to Chittagong, in which any altitude may be attained from the side of India, and which are for the most part

inaccessible from the other side. Of the highest and most secure portion of this mountain system, the great Himalayan range, a considerable extent is British territory, stretching in several places right up to the eternal snows and to the borders of the Thibetan plateau of high Asia. The outer range of the outer Himalaya very commonly attains a height of 7000 or 8000 feet, and a sea of mountains extends back for 100 or 150 miles to the inaccessible snows. The general characteristic of the range may be said to be that as a rule it contains no valleys, no lakes, and no table-lands. There is but, as it were, a gigantic system of ravines; the valleys are ravines, and the mountains are very steeply-inclined sharp-backed ridges.

On the hills throughout the entire range it may be said that there is not one acre of level ground. The sparse dwellings and fields of the hill-men are terraced on the mountain sides, or obtained by taking advantage of petty nooks and shoulders of hills, indistinct alluvial steps on the sides of ravines, and small strips of rice-land at the bottom. Except on the rare roads, curiously constructed with great engineering skill, wheel and even most animal carriage is out of the question; and even on foot none but a hill coolie, an inveterate sportsman, or a mountain sheep, can attempt to leave the roads.

Within this system of mountains lies the great alluvial, or diluvial, plain which also extends in one continuous curve from the mouths of the Ganges to the mouths of the Indus, with a breadth of about 150 to 200 miles, forming, in the different portions of its length Bengal proper, the North-West Provinces, and Oude, the Punjab territories, Scinde, with the adjacent desert, and, perhaps we may add, Guzerat. Here the contrast to the hills is carried to the utmost; for as in the hills there is not a piece of flat ground sufficient to plant the sole of one's foot, so in the plain there is nowhere, it may be said, an undulation of twenty feet, and no such thing as a stone of the smallest dimensions throughout its whole extent. For our purpose the plain may be considered as nowhere rising perceptibly or materially above the level of the sea.

The whole of the rest of India may be said to be composed of one solid formation of a pretty uniform character, to which the deltas of the rivers and low diluvial lands of limited extent are mere exceptions. By far the greater portion of all this tract is a rocky and more or less hilly formation, considerably elevated above the level of the sea, and it is contrasted equally with the Himalayas and the plains; for as the one is all sharp-peaked ridges without valleys, and the other all dead-level plain, here it may be said that there is nowhere either one or the other; all the hills seem to have flat tops, and all the rest is undulating high land and valley. Hills are

nowhere altogether absent, and the country is seldom purely mountainous. This formation ends to the north and south in two apexes conspicuous on the map, the city of Delhi and Cape Comorin, which, singularly enough, are as exactly in the same longitude as if they had been laid out with a plumber's line. If we include Cutch and Kuttywar, we may describe the whole as a diamond-shaped country, the points of which are Delhi, Cape Comorin, Cutch, and Rajmehal. The geological character of the whole of this region is, I believe, in its principal features much the same throughout, and very peculiar, large masses of trap being constantly thrown up over the sandstone and other formations into hills and eminences, which again are usually capped by the singular flat tops composed of red laterite. The soils (with the exception, of course, of the alluvial and diluvial deposits interspersed) seem to be pretty universally composed of two sorts; the peculiar black soil, said to be the *débris* of the trap, often of considerable depth, and lying upon a retentive kind of rubble, and the red soil the *débris* of the Laterite. Both are fertile, though as different in their characters as heavy and light soils can be.

Delhi, as is well known, is situated within a few feet of the level of the plain, on the last low spur of the red sandstone projecting towards the north, so that not only historically but geographically it is a permanent point. It is, as it were, the last point where a city is not liable to be washed off the alluvial soil by a change in the course of the great rivers. Agra is also on the edge of the solid formation. For a considerable distance south of Delhi the country does not seem to rise to any considerable height, and when it does rise it is very gradually to the south and west. Farther east, opposite Allahabad and Mirzapore, there is a more marked and sudden rise by a steep ghat line, and as we go south and west we come to a considerable elevation and a pleasant climate. Neemuch is about 1400 feet high, and farther on many stations, situated widely apart, are all placed at a pretty uniform height of about 2000 feet above the sea, viz., Saugor, Indore and Mhow, Oodeypore, Baitool, Chandwara, Seonee, Hazareebagh, and others. In the extreme west the Aravallee range culminates in Mount Aboo, upwards of 5000 feet above the sea. Along the southern face of this high land a considerable height is also attained in several places.

It appears to me that the common assumption that the Nerbudda is the boundary between North and South India is a mistake. Rivers never are ethnological and seldom geographical boundaries. The Vyndya range, north of the Nerbudda, in the sense of a marked dividing line (a sort of backbone of India as it is sometimes supposed to be) seems to be quite a myth. I mean, that it is not an

elevated range of hills forming a real and substantial boundary. The country to the north having already attained a general height of about 2000 feet, I believe that scarcely a peak of this range rises 500 feet above the general level; at any rate, it is certain that throughout the whole range there is not a spot which has ever been used or suggested as a sanitarium on the smallest scale. On the upper valley of the Nerbudda there is not even a heavy descent; the roads seem to find their way into the valley without any very steep or marked ghats. It is only lower down, when the Nerbudda has cut a deeper and narrower gorge into which it rushes down over rocks and falls, that its level is low, jungly, and unhealthy. It may be said that south of the Himalayas and north of the Nerbudda there is no available ground whatever above the general level of 2000 feet, excepting Mount Aboo.

What is called the valley of the Nerbudda seems to be in fact but a narrow and partial depression in the general level of the high land, into which the Nerbudda runs at Jubbulpore, and out of which a branch of the Soane runs the other way, a little to the east of Jubbulpore. Easily the roads from north to south make a slight descent to Jubbulpore and Nursingpore, and easily they rise again to their former level in the country south of those places. That country as a plateau reaches its greatest height of 2200 or 2300 feet quite on its southern edge, immediately before we come to the steep ghats on its southern face which lead down to Nagpore and Berar; and on this southern face of the plateau the hills do rise considerably above the general level, constituting what I shall in general terms call the Sautpoora range. That range seems to me to be the only real backbone running east and west. In the sense in which I use the term, it extends from near Broach by Asseerghur, Baitool, Pachmaree, Seonee, Ummerkantak, Sohagpore, Hazareebaugh, and Parisnath, to Rajmehal, and divides the watersheds of the Nerbudda and Ganges from those of the Taptee, Godavery, Mahanuddee, and Damooda. The Pachmaree hills in the Central Provinces are about 4500 feet. Near Ummerkuntak there is similarly high land, and Parisnath is 4478 feet high. The southern face of this range seems to be in every way the true natural and ethnological boundary of North India. Till we come to these ghats the population (with the exception of the scattered Gonds and Khonds of the hills) are Hindee speaking, and in all their characteristics Hindoostanees.

Immediately under the southern face of the Sautpoora there is generally a strip of jungly, unhealthy, and almost uninhabited country, which still more tends to make the natural boundary distinct. As soon as we get south of this line we are among the Mahratta-speaking population of Kandoish, Berar, and Nagpore, the

Ooryahs of the Mahanuddee, and the Telingas of the Lower Godavery, in short, in Southern India. I designate as the northern plateau the country rising to the south and west from Delhi, Agra, Allahabad, and Sasseram, into Central India, and bounded on the west by Aboo and the Aravallees, on the south by the great length of the Sautpoora range from Tooran Mull to Parisnath.

This northern plateau is separated from what I shall call the southern plateau by a depression much deeper and more considerable than that of the Nerbudda, and forming a much more distinct geographical division. It may be said to extend right across India from the gorge of the Lower Taptee, by Kandeish, Berar, the valleys of the Nagpore Province, and the course of the Wardah and Godavery to the Bay of Bengal. This country does not descend quite to the level of the sea, nor is it so flat an alluvial plain as the great plains of the Ganges. But it is all situated at a level so low as to make its character entirely tropical. The whole of the country between the Godavery and the Mahanuddee, and again from the Mahanuddee to the borders of Bengal, is (with the exception of the strip along the coast) unhealthy, jungly, and sparsely inhabited in the extreme. This is, in fact, the great tract so long marked as "unexplored," and to the present day almost a blank in our maps. This unexplored country seems to be very hilly and broken, and it lies, at the same time, for the most part comparatively low, and within the worst fever-level. But on the south-eastern border, approaching the sea, as if to make up for previous deficiencies in elevation, the eastern ghats rise far beyond their height in any other portion of their course. As, however, the healthiness and practicability of these places has not been ascertained, and I do not think it probable that under any circumstances any one will propose to place the capital of India there, it will probably not be necessary that I should recur to them.

We may say that the depression dividing the northern plateau from the high country to the south attains its greatest breadth of about 60 miles in Berar, and is there a very well-defined valley, distinctly bounded by the Sautpooras on one side, and by the southern ghat range on the other side. The proper western ghats (as the name is usually applied) seem to end at the Taptee, for beyond that river, though a broken hilly country is continued to Aboo and the Arravallees, it is not so clearly marked as a defined range running north and south. From thence the north extremity of the proper western ghats just south of the Taptee, as if the ghat had taken a turn at right angles, the range which I have already in general terms described runs east and west. It is comparatively low, and at first not very prominently marked, sloping gradually into Kandeish, but

further east it is very well marked, and contains, as I have said, some pleasant climates about Ajunta, Booldana, &c. It is, however, more important for my purpose, as marking the northern limit of the southern high land. The line of this range, and its continuation of hilly country along the right bank of the Godavery to the eastern ghats, may be said to mark off from the rest of India the Deccan, or south country. This south country, again, is principally occupied by the high land to which the term Deccan is in its more general sense applied.

The Deccan may be described as a triangle bounded by the northern line already mentioned, the western, and the eastern ghats. But the country about the Lower Kistna and Godavery seems hardly to partake of this character, and there does not appear to be any high ground which requires mention in that portion of the eastern ghats; therefore we may limit the eastern boundary of the southern plateau to about the longitude of Hyderabad. It extends, then, for our purpose from Berar to the Neilgherries, and from the parallel of Hyderabad to the western ghats. It may be said to have a general level of about 2000 feet, the plateau generally ranging from 1500 to about 2500 feet, and most of the stations in the Deccan being either a little above or a little under 2000. Belgaum, Dharwar, and Mysore are about 2500, while Bangalore alone attains 3000. The plateau generally slopes gradually from west to east. All the rivers rise in the western ghats, and find their way through the eastern ghats to the Bay of Bengal.

1 The western ghats all along the line rise in ridges to a considerable height above the level of the plateau; but there are everywhere passes through them, little, if at all, above the ordinary plateau levels. In fact, the ghats are not, as generally depicted, a ridge running north and south. The rise of level, the break, as it were, and upheaval in the crust of the earth, runs north and south, but the hills are rather a succession of transverse ridges, placed, as it were, edgeways to this line of general elevation. The sudden break in these ridges, and subsequent denudation by watercourses and landslips, gives to the broken ends a peaked and jagged appearance when we look from below. But on the other side, where the ridges run back into the Deccan, the usual flat-topped character of the hills is observed, and along, as it were, the flat backs of the ridges, ground is found fitted both for cultivation and for sanitarium, not broad, but running back in narrow irregular slips and promontories. On such places, at elevations of from 3500 to 4500 feet, say generally about 4000 feet, are and may be placed sanitarium, in a cool climate, at many points all along the ghats. The transverse ridges themselves gradually tail off into the Deccan, but some of the most



prominent may be traced for almost hundreds of miles, *e. g.* one runs from immediately over Bombay (from about Jooneir) to Beder, not far from Hyderabad. On one of the flattest tops of one of these transverse ridges, immediately overlooking the drop into the lower country, and therefore, at one of the highest and coolest points, is Mahableshtar. All over the Deccan occasional flat-topped hills stand up here and there, and are sometimes so large and so high as to afford room for sanatoria. There is a good one near Bellary 3500 feet high, two near Bangalore marked 4600 feet, one in the north of the Mysore country marked as upwards of 6000 feet high. Between the ghat ridges the narrow passes through which the roads are carried soon expand into the large valleys and broad irregular high-level plains of which the Deccan is mainly composed.

At the southern extremity of the southern plateau the western and eastern ghats seem to run together, and to be heaved up into the great block called the Neilgherries, which, again, has a flattish top about 7000 feet high. South of the Neilgherries there is a great depression, which does not altogether sink to the level or character of a plain, the railway through this depression running through a country for the most part hilly, and in places as high as nearly 1500 feet. Beyond this depression, again, rises another block or range almost as high as the Neilgherries, and similar in character, which, at a greater or less elevation, extends to Cape Comorin, and the different parts and branches of which are known as the Pulneys and Anamullees, Travancore and Tinnevely hills: they are all parts of one connected range.

Thus, then, I have, I think, exhausted in general terms the map of India, with especial reference to the altitudes by which the climate is so much determined. Setting aside those parts which I have dismissed as immaterial to our present purpose, I may say, then, that we have the following regions:—

1. The Himalayas.
2. The Great Plain.
3. The Sea Coast.
4. The Northern Plateau.
5. The Southern Plateau, or Deccan.

The south-west monsoon may be said to blow partially from that quarter at an earlier date (especially in the south), but it only acquires strength, and begins to bring in the regular rains about the beginning of June. It is chiefly felt as a regular monsoon (that is, a strong and constant wind from one direction) on the west coast, and in the countries which derive their supply from that quarter. There it comes in from the west with great violence in June and July; and though the wind becomes lighter in August, the rains

may be said to last to the beginning of October. It appears, so far as I can gather, that they are not quite so heavy in the extreme south, but going northward, along the Malabar and Canarese coasts, they are excessively heavy, and so continue till towards Bombay they begin to lessen in intensity. North of Bombay the quantity of rain lessens; in Guzerat it is much less, and further north it disappears altogether; so that in Scinde and the desert there is no regular rainy season, and scarcely any rain. The great plain, therefore, gets no rain supply from the west, unless, indeed, any of the western clouds find their way to Agra, or other places on the banks of the Jumna, of which we have no information. The mass of the clouds brought up by this west monsoon are poured out on the western ghats, the rainfall there rising as high as 300 inches or more, and rendering all the exposed places on the ghats and neighbouring hills almost uninhabitable in the rainy season. But though these very watery clouds reach to the top of and over the crest of the highest of the ghats, it is singular that they go little beyond the outer line. It appears one of the most extraordinary phenomena to be seen, that on these ridges you may stand at an elevated site and see one point (near the edge) where there is a fall of 300 inches, another, 8 or 10 miles further back, where the fall is not above a fourth or fifth of that quantity, and another half-a-dozen miles further still, where it is almost reduced to a minimum, perhaps is not more than 18 or 20 inches in the year; and all the while there is no visible obstacle to arrest the progress of the rain between these places. In fact, the monsoon, so far as the current of air is concerned, continues its course uninterrupted. It seems that the rain-clouds just curl over the top of the western ghats, and in the course of about 15 miles lose the whole of their excessive moisture. The country beyond gets all the benefit of the coolness and airiness caused by the rain and wind, without the heavy rain itself, and consequently the climate of this country beyond the ghats appears to be, during this rainy season, one of the most delightful in the world. This gives the country about Poonah and along the line of the rail towards Sholapore an arid and treeless appearance.

In the south, towards Dharwar and the Mysore country, the supply of rain is better, and there is not the same aridity. On the Neilgherries the fall of rain is not so excessive as to drive away the European residents, but throughout the rainy season there is much driving heavy rain; and in this respect Ootacamund seems to have no advantage over Simla and the Himalayan stations. In all India there are but two tracts thus deprived of the rains brought up by the south-west monsoon, Scinde and the desert in one quarter, and the Madras coast in another. It is this want of summer rain

which gives their great importance to the irrigation works of the Madras deltas, since the rivers, filled by the immense rainfalls of the western ghats and the moderate periodical rains of the intervening country, are just at their highest when water is most wanted in the deltas, and it is then most easily distributed from the over-filled and overflowing channels.

In the northern portions of the country watered by the western monsoon it appears that, although the coast supply of rain is much smaller than farther south (decreasing from about 180 inches at Mangalore, and 120 in the further Concan, to about 35 in Guzerat), the country in the interior is better watered by the monsoon than farther south in the Deccan. All Central India seems to receive its rain-supply from the west. Berar and Nagpore are well watered, and the neighbouring stations on the northern plateau are moist; Baitool and Seonee are so, and Jubbulpore is, in the rains, decidedly moist and tropical. Mhow is dry, but there is more rain at Neemuch, and Saugor is cloudy and well watered in the rains. It appears that throughout Central India there is a peculiar cloudiness in the rains, so that at Saugor and Jubbulpore the sun is sometimes seldom seen for a month together.

It may be generally remarked of all the countries affected by the direct westerly monsoon that the rain comes with a much more steady and regular wind than in the plain of the Ganges. It may be expressed that the one is a proper monsoon, and the other only a rainy season. This steady wind makes the rainy season cooler and less muggy. The remark, of course, applies in a greater degree to stations more nearly and directly exposed to the westerly monsoon than to those at a distance; but even at Nagpore, at a scarcely greater elevation than Meerut or Delhi, and nearly 500 miles from the sea, the rainy season is very much cooler and more pleasant than at those places. It may, then, generally be said that all the places partaking in the monsoon of the west coast (except those where the rain is unendurably heavy, or where the elevation is too great to make the wind a desideratum) have, altitude apart, a pleasanter climate in the rains than those of the Bengal Presidency, and that as almost all the stations in the interior are placed higher than those of the great plain, without being too high, they are, as a rule, very much pleasanter at that season.

Another branch of the south-western monsoon at the same season affects the greater part of the Bay of Bengal and the eastern side of India. In the southern part of its course this branch is separated from the western branch by the Madras country, and part of the adjacent sea. Rounding the southern extremity of Ceylon, the monsoon takes a south-westerly direction, and thus keeps clear of that

part of the eastern coast which runs nearly due north and south. But as it gets farther up the Bay of Bengal it blows more directly from the south. At Vizagapatam the fall seems to be light; it increases in Cuttack, and is pretty heavy in Calcutta. The total annual rainfall there is about 65 inches per annum. In Eastern Bengal it is much heavier, and on the hills of the extreme east it is enormous, sometimes, it is said, as high as 600 inches in a year.

At Calcutta and in Lower Bengal at this season (and for some time before in the hot weather) the breeze is hardly strong and regular enough to fulfil the idea of a monsoon, but still there is a pretty constant southerly current to which that name may perhaps be given. Proceeding north, this current is again deflected to the west, and so in a weakened and less constant form it proceeds up the plain of the Ganges. It can no longer be called a monsoon, and is very varying and inconstant; but still there is, during part of June and the following months, a general tendency to south-easterly and easterly winds or currents, which bring up the monsoon rains, and to which the country is indebted for fertilising moisture. As a general rule, then, the whole upper plain of the Ganges receives its rain supply from the east; and this supply, though from a contrary direction, is moved by the same impulse, and is, as it were, part of the south-west monsoon. Proceeding farther up the country, the supply becomes less and less, but seldom fails altogether till we pass into the watershed of the Indus system of rivers. It is always heavier near the Himalayas than farther from them. Passing Delhi, the flat country to the left is very scantily watered, but nearer the hills the supply continues. Crossing the Sutlej, the Jullunder Doab is well watered, but at Lahore the supply is scanty and precarious, and farther on the watered country becomes narrower till, beyond the Jhelum, these periodical rains seem to be confined to the hills. Everywhere in the plains the breeze being so light and uncertain, and the rain-supply broken and interrupted, it is frequently or generally muggy and hot throughout the rainy season. In the lower parts of the Upper Provinces, and near the hills, the annual rainfall may be taken to be 40 to 45 inches; further up and further from the hills it diminishes to about 25 inches. In the greater part of the Lower Punjab there is no regular rainy season that can be depended on, and the absence of rain in the tract between the Punjab, the ocean, and the Aravallee range causes the great Indian Desert.

It is not till very high ranges of 13,000 or 14,000 feet intervene that the periodical rains cease in the hills; but far in the interior, beyond those high ranges, they are little felt. In the remote hill-

regions, twelve or fourteen marches beyond Simla, we are nearly beyond their influence. It is the same in Cashmeer, and the rains do not reach into Thibet.

The Bengal branch of the south-west monsoon seems to be, as it were, slewed round to make the north-east monsoon. The country in the east of the peninsula, which receives a share of both monsoons, is rendered moister than those which receive but a scanty share of one. The easterly October rains, though heavy only to the east, seem to extend in a slight shape almost throughout the breadth of the peninsula, being more distinctly perceptible in the centre, and less so in the west.

As respects the rest of the year, northerly currents of air prevail, I believe, for some months on the Indian Ocean. In Calcutta the cold weather air generally comes from the north. In the Upper Provinces there is no very prevailing wind in the cold season, and the nights are usually quite still. In March, April, and May, again, westerly wind prevails in the Upper Provinces, and as the desert and dry country over which it blows becomes heated, these winds become the hot winds of May and June. All round the coast, during the whole season in which the strong monsoon is not blowing, the diurnal sea and land breezes are constant.

I think that I have now mentioned all the main elements affecting the climate generally. Now as to the result on the climate of particular places.

Taking Calcutta, Madras, Bombay, and any good station in the plains of the Upper Provinces, it is impossible decidedly to say which is best; all are so balanced that those who prefer one or the other may, with some reason, maintain its superiority. It may be observed that, for three or four months Calcutta is quite cool enough for ordinary sedentary residents, so cool that the feeling of disagreeable heat is altogether absent. At the same time, the air is not very bracing. Up the country the cold weather is decidedly superior; it lasts longer, is colder and more dry and bracing, without being (till, perhaps we get up as far as Lahore) at all raw or disagreeable. On the other hand, the hot weather in Calcutta, though no doubt very hot, is tempered by the southerly breeze which often makes the evenings almost cool while we are directly within its influence; whereas the heat up-country of the two months from the latter part of April to the setting in of the rains is tremendous.

In the rains, again, the southerly breeze and abundance of rain make the first part of that season in Calcutta preferable, I think, to the Upper Provinces, where there are often very hot breaks in the

weather, and a tendency to muggyness. Later in the season, when the wind fails, Calcutta is much more moist than the drier country ; but, then, again, the rains last longer, and there is not so much of the fever and ague which often attend the hot drying up of the rains in many of the less moist stations of the Upper Provinces.

On the whole, I think Calcutta is a dangerous place for new arrivals, but, perhaps, not more trying to acclimated sedentary residents, living there all the year round for a series of years, than would be a similar life at an up-country station. Although healthy people leading an active life up-country may look much better than those who sit in offices in Calcutta, still, for sedentary legislators and administrators fixed for business in the hot and rainy months, there would be no very great advantage of climate at any station in the plains of the Upper Provinces.

Madras being only less warm than at other seasons for a short time in the cold season, and little cooled by the south-west monsoon, has an average temperature higher than any of the places with which I am comparing it. Some people seem to live robustly there to a good age. There are also now excellent facilities for getting away for a change to Bangalore, the Shevaroy, and the Neilgherries.

The country under the western ghats is not so unhealthy as such sub-montane tracts in tropical climates sometimes are. But the low, confined valleys which the sea-breeze does not well reach are decidedly unhealthy. The sea-breeze is everything in those parts ; and at all the places on the coast, to be either cool or healthy, you must be actually on the sea and exposed to the direct action of the breeze. Bombay itself is by no means an unhealthy climate. It seems to be pretty free from malarious influences. On the whole, Bombay, taken by itself, seems to be a healthier place than Calcutta, and, taking into consideration the facilities for change, it is much healthier. In the rains, within 120 miles by rail, that is, 7 or 8 hours' journey, is the delightful climate of the Deccan.

It would be useless to carry this comparison farther ; the present capitals of the different provinces are sufficiently good instances of the climate of the plains and of the coast ; and no other places similarly situated are likely to be chosen to supersede them. To find a better climate we must look to a greater elevation.

At an altitude of 7000 feet, which is about that of our hill sanatoria, we secure a cool European temperature throughout the warm months of the year ; and in the northern hills, where there is also a cold winter, the climate might be described as European throughout the year were it not for the marked periodical rains. At Simla and Mus-

sooree the hot weather is, in the day, like the warmest and most sunshiny English summer weather. At Darjeeling, the rains, and more especially the mists, commence earlier and leave off later, and the fall is heavier; there is, therefore, a much smaller proportion of agreeable weather. On the whole the hill climate is probably, in itself, not much less healthy than England, but the confined character of the ground, and the want of room to move about, certainly make the hill stations much inferior to England for the development of a growing human frame.

The summer climate of the Neilgherries is about equal to that of the Himalayan stations; it seems to be mere matter of varying opinion which is preferred. Probably, the greater flatness and roominess of the ground about the Neilgherry stations, and the absence of extremes of climate, render them a better residence for permanent inhabitants of stationary habits. Ootacamund seems to be not altogether free from a little fever, and at somewhat lower elevations in those southern hills fever is unluckily very prevalent. It appears that the fever range runs very high in those parts. The Wynaad and other places, 4000 or 5000 feet high, suffer much from this scourge. It is, therefore, not necessary to consider, as fitted by climate for our purposes, any places at an elevation between the high level of the Neilgherries and the ordinary height of the southern plateau.

The sanitarium on the edge of the western ghats in the Bombay Presidency are not, at the highest point above, 4500 feet; but then they are within the influence of the sea-breeze, which, in the hot weather, is so constant that the heat is never oppressive, even at a less elevation than that which I have mentioned. At this season these places are, probably, at least as healthy as any of the higher hill stations—perhaps more so. Indeed they seem to be, throughout the year, free from any marked unhealthiness. But during the rainy season, the mere force and amount of rain causes them to be deserted; the more so as the much better climate of the Deccan at that season leaves no temptation to remain on the ghats.

A few miles inland, however, on the backs of some of the higher ridges, places may be found where the climate is good all the year round, the rains not being heavier than at Simla or Ootacamund. Of course, as we remove from the direct effect of the monsoon, we also somewhat lose the force of the hot weather sea-breeze; but say at 4000 feet high, within 15 or 20 miles of the edge of the ghats, the breeze is not wanting in the hottest weather, the climate is never disagreeably warm, and, for a permanent residence in an open healthy situation, and among cultivated fields, there are probably

no better sites in India than these; the Neilgherries, perhaps, excepted.

There remain among high elevations only those of the Sautpoora range. Unfortunately it happens that no situation, combining considerable height (I mean something above, say, 3000 feet), space and healthiness is to be found. A good deal of unhealthiness hangs about the whole line of this range. In the north of Kandeish, about the Nerbudda under Mhow, and in the jungles near Asseerghur there is very bad malaria. This unhealthiness of the valleys also, in some degree, extends to many of the wooded hills of the range. The portions of the range which ascend to a high level are very rare and limited, and in point of mere space insufficient. Nearest to the sea, and so far very favourably situated, is the newly discovered Tooran Mull in the north of Kandeish, said by its discoverers to be delightful; but, if so good, it seems strange that it should yet be but imperfectly discovered.

A good way farther east we come to the Chikuldah hills, which form a pleasant local sanitarium for Berar, but they are only about 3000 feet high, are not very healthy in the rains, and are very limited in extent. Pachmarree and Mohtoor are a little higher, but the same remarks apply to them.

The open parts of the adjoining plateau are pretty healthy. Parasnath, though it may be, as I have already suggested, a good place of local and temporary resort from Calcutta, is not fitted for anything larger than that. I repeat, then, that in the Sautpoora range, there is no extensive site with a high elevation and a climate always cool and healthy; so that resource must be abandoned.

I now come to the middle-placed plateau climates at elevations of from about 1500 to 3000 feet.

The southern plateau may be generally described as remarkably healthy. Bangalore is one of the best stations in India. In the north of this plateau, in the Bombay Presidency, the districts near the ghats are the healthiest of all, being free from jungle and from excessive rain and moisture, and, in addition to a considerable elevation of about 2000 feet, having the advantage of a sea-breeze in the hot weather, and of the cool monsoon-breeze already described in the rains. With the exception that the cold weather is inferior to that of northern India, the Deccan climate is clearly vastly superior to anything known in the plains; the hot weather is much less hot and more easily avoided, and the rains are as superior as the best climate can be to the worst. That the climate is, in truth, very healthy to the European constitution is clearly shown by military statistics. The Deccan stations of the Bombay Presidency are, it



would appear, among the healthiest quarters of the British Army. An average of ten years' return in the Appendix to the Report of the Royal Sanitary Commission shows the annual mortality of the European troops at these Deccan stations to be only  $1\frac{1}{4}$  per cent. or between 17 and 18 per thousand.

The northern plateau, with the exception of the jungly parts on the southern edge, is generally healthy. Yet here and there the taint of fever slightly extends into the open country. Mhow has a very pleasant and healthy climate; and Malwa is a very fine and very central country. If Malwa had been British territory, it might have been very well worthy of consideration for our present purpose; but as it is not, and there is no prospect of its becoming so, we must put it out of the question. It may, however, be mentioned that Mhow does not seem to have the advantage of climate over the Deccan stations, although the latter are a degree or two south at the same elevation of about 2000 feet. Saugor, in British territory and about the same height, had also a mild and good climate, but besides being very far from the sea it is off the line of the Rail and has no hill sanatoria near it. Jubbulpore again, though one of the pleasantest-looking, and to those with whom it agrees most pleasant stations in India, is unfortunately decidedly feverish. It is perhaps, with reference both to geographical position and to the great lines of communication, the most central spot in all India; and in point of situation, fertility and beauty of vegetation and surroundings, it cannot be surpassed.

On the whole, I think it must be considered that the climate of the higher parts of the northern plateau are not so good as those of the Deccan.

Bombay is, beyond, I think, all doubt or question, destined to be in every way the port of India. Instead of the present great route from Calcutta to the Upper Provinces, the grand route will be from Bombay, through Central India, to the Upper and Northern and even Eastern Provinces, and the second important route will be from Bombay to the South. Bombay, and not Calcutta, must then be the main starting point and basis of Military, Commercial, Industrial, and Social enterprise in the interior of India. The European community must be greatly extended and amplified, new demands will create new supplies; if the present town will not suffice, new towns must rise, around the only good harbour on the west coast of India; and altogether Bombay must advance enormously, and must, it seems to me, in a short period greatly surpass Calcutta, which will be in future only the prosperous capital of rich Bengal.

I conclude, then, that looking to the different elements, European

and Native, and to the early future as well as to the present, Bombay is a place of greater importance and a more powerful attraction in fixing the seat of Government than Calcutta.

I have already expressed the opinion that the permanent capital should be within reach of the sea, and that the Himalayas are thus rendered unfit for our purpose. I also think that, if that objection were over-ruled, still the offices and permanent capital should not be placed out of reach of the ordinary population and traffic, out of the course of affairs, and removed from the practical stir of life to a remote ridge in the interior of the Himalaya.

The Neilgherries are within a moderate distance from the sea, and have very many advantages. But, in my opinion, they are too far removed in a remote corner of India, and too distant from the most important populations and the greatest Political, Military, and Commercial centres. They are also subject to the exception, which I have taken, against places too much isolated by height and climate from the ordinary business and people of the country.

Bangalore is not sufficiently central. We next come to the Deccan high land of the Bombay Presidency. And here I must premise that the most well-known station in the Deccan, viz. Poonah, is by no means the most favourable specimen of that country. Poonah is neither an ancient historical site nor a selection of the British Government. As a place of temporary resort during the rains, probably, convenience of situation and all things considered, no place could be much better. The excessive dryness, barrenness, and aridity of the soil and climate which detract from the place at other times, are rather an advantage during the rains.

But both north and south of Poonah the Deccan presents a much more favourable aspect—is more fertile, greener, and cooler. All the stations to the south, Belgaum, Dharwar, &c., are in these respects superior and have altogether (taking the whole year round) a pleasanter climate. They are also quite as healthy, the average mortality of the European troops nowhere exceeding eighteen per thousand, and they are generally preferred as in every way better stations. Their position, however, to the south and out of the way of the main lines of communication, puts them at a great disadvantage for our present purpose. We must then look to the north of Poonah—and getting to the northern extremity of the Deccan, we come again to the other line of railway, the great line bisecting the country and connecting the great centres of British power and population in India.

If there is anything in the views which I have put forth, the best spot, geographically speaking, is the high land above Bombay, and

if it so happens that the spot thus geographically the best is also a healthy pleasant place, with a temperate climate and a good political situation, the necessary conditions will be fulfilled. I think that they are fulfilled, and proceed to give particulars.

The tract to which I allude is comparatively unknown, having been hitherto cut off from the route of passengers by want of roads. It has now been penetrated by the rail. The Thull ghat is now opened to the public, putting it in direct railway communication with Bombay, distant about 100 miles. No doubt then it will soon be better known and more resorted to; meantime I give the result of my own observations and inquiries, First as to the geographical and political position. The tract in question is the high land over which the Great Indian Peninsula Railway Company's North-East line runs, from about the 85th to about the 150th mile. As regards means of communication, hardly any place can be so central. The main line at Allahabad reaches a great centre of communication. The right or easterly line to Nagpore may eventually, by that more direct route, reach lower Bengal. A left or north line has been already surveyed to Indore, and will, without doubt, eventually reach Agra or Delhi by that route.

When I have shown my plateau to be geographically central and unrivalled in means of communication, the elements of a political centre are almost given. But I may also say that taken from a political and ethnological point of view, the result is the same. We are at the extreme north-western point of the territory of the great Mahratta-speaking race, the greater part of which (in the Bombay Presidency, Berar and Nagpore) is subject to British rule. Closely adjoining is the great Hindostanee race which occupies the north country up to the Sautpooras, and in fact so much overflows to the south that, at the point where we now are, the greater part of the labourers, carters, &c., are Hindostanees, and the Hindostanee language is as current as the Maratta. A little to the north-west is Guzerat. Within twenty or twenty-four hours' journey by rail are all the great seats of Hindostanee population and political action, on the Jumna and Ganges. Another day will bring the Governor-General to the Punjab, to Lower Bengal, or to the farthest parts of Madras. The position, then, relatively to the rest of India being so good, let us examine more minutely the locality itself. I have said that the high land over which the north-eastern line of the Grand Indian Peninsula Railway runs, at an elevation of about 2000 feet, extends from the 85th to about the 150th mile, say for sixty miles; the greatest part of this tract being nearly a plain, varied by a surrounding of hills. This tract is highly cultivated and watered by

several streams, one of which is the infant Godavery, and the others its tributaries. The soil is for the most part a fertile blackish diluvial loam, but not the ordinary black cotton-soil—no cotton grows there. In entire contrast, however, to the Deccan country about Poonah, there is (in addition to the ordinary rain crops) a great abundance of the best cold-weather crops, such as we see in the North-Western Provinces; a very large breadth of wheat, and also sugarcane, tobacco, oilseeds, gram, &c., &c. Trees thrive extremely well and look well-grown, green and healthy. The breadth of the open tract being so considerable, it is in no degree rendered hot or close by the hills, which on its outer circle nearly surround it, and which, looking from so considerable an elevation, do not seem very high. But these hills supply on all sides a great abundance of small perennial-running streams, easily used for purposes of irrigation, and which give this country a cheery, well-watered look. At the same time it is entirely free from anything like stagnation, jungle or miasma; the culturable part is exclusively occupied by cultivation, and the rainfall being small (as I have explained it to be in all the Deccan country behind the ghats) the hills are free from jungle, except on the western face of the ghats, looking the other way.

As a fair specimen of this plain of the Upper Godavery, let us take Nassick, the head-quarters of the Civil Establishments and within 5 miles of the railway. This place is by rail, if anything, nearer to Bombay than Poonah, being 116 miles to 119, the distance of Poonah. The ghat ascent is also somewhat easier. Nassick is about the same height as Poonah—rather higher than lower. The town is a compact, high built, tile-roofed place on the banks of the Godavery, of 20,000 or 30,000 inhabitants. The surrounding country is very fertile and well watered, abounding in groves, gardens, wells, and small canals. The mango-trees (their appearance is a great test in India) are as well-grown and thriving as in any place which I know, and there is a feature which I had never seen elsewhere in India, viz., many great native vineyards. Several single vineyards cover many acres each, the vines being trained high, over trees planted and pollarded for the purpose, after the Italian fashion. The vine is a great test of climate, and I fancy of healthiness. The climate is what I have before in general terms described the Deccan climate to be. Being the most northerly point of the Deccan, there is the best cold weather, without so much of a bitter, dusty wind as farther south. The rainy season is somewhat cooler than at Poonah, and in every other respect quite as pleasant. One more advantage of this same part of the country I

must add, viz., the facility for getting down in a few hours to the sea-air and sea-bathing of the cool season on the coast, on the line of the Bombay and Baroda Railway. No part of the country is more healthy than Nassick and the surrounding district.

I would propose then to select for the capital some suitable spot of this kind in the plain of the Upper Godavery, coupled with a roomy sanitarium available within a couple of hours. Between the railway station and Nassick there is a high, dry and very open site, at present somewhat bare for want of water. If water were brought upon this spot, from a few miles up the streams on either side, it might be a very admirable location, or many others might be selected and compared. The ghats, backed by the sea on one side, and these hills on another, would go far to make the capital impregnable on those sides. On the north the deep jungly valleys of the Taptee and Nerbudda, and the intervening hills, would be a sufficient defence. On the north-east it would only remain to take advantage of the north wall of the Deccan—the Chandore range, through which the railway passes to Kandeish. If it should be necessary, the few passes might no doubt easily be rendered defensible. On the east the valley of the Nerbudda would be easily held. In this elevated plain we should have, as it were, the capital in a great park of 50 or 60 miles in diameter, enclosed in a complete ring-fence. That capital would be a pleasant, healthy place in a good climate, and the European houses would be surrounded by gardens and vineries, and all things pleasant to the eye, which are so essential to a permanent abode. There would be an abundance of pleasant country, abounding in European residents and residences in the neighbourhood, and the most abundant opportunities for change of air, to cool hill-climates for those who wish to avoid the heats of the hot weather, and to sea-shore and sea-bathings for those who wish to avoid the chills of the cold weather, or the early heats of March. For seven, eight, or nine months the work of Government would go on uninterruptedly. For two or three or four or five months in the cold season, as the case might be, the Governor-General and the Members of the Government would be free to visit all India.

The PRESIDENT explained that Mr. Campbell was a gentleman of great distinction in the Indian Government, long resident in India, who in his vacations had explored a great part of the country, with the view of ascertaining the best site for a capital. The paper was of value as a review of Indian geography, and should lead to the construction of a better map of India than the one which the Society at present possessed. He hoped before another paper on this subject was read that they would be able to exhibit a satisfactory map of Hindostan, from the Himalayas down to Cape Comorin. With regard to the subject

discussed in the paper, he saw present several gentlemen of high distinction, who had passed many years in India; and he should be glad to hear observations from them concerning the climatology and geography of the country in connection with a proper site for a capital. With regard to Nassick, the place selected by Mr. Campbell as the best site, it appeared that this town had been the seat of a college of the Brahminical priesthood. He had no doubt that these learned men, like the monks of old in our own country, knew how to select the most salubrious spots for their residence.

Mr. W. J. HAMILTON (Chairman of the Great Indian Peninsula Railway) said it was only that afternoon he heard incidentally from the President that this was to be the subject of discussion; therefore he was not prepared to say more than that as the Great Indian Peninsula Railway passed through the district, it must be an object of great interest to them that such a position should be chosen as the future capital of India. He had often heard it stated that in the future the capital of India must be changed. Calcutta was too far off, too much out of the line of immediate communication with Great Britain, to be the appropriate capital of India. Bombay had been suggested as the future capital, as soon as the different lines of railway from Bombay, the nearest port to England, shall have been constructed across the Peninsula to the north-east and the south-east. But there were great difficulties connected with that site. The island of Bombay was very small: it was already overpeopled, and it was extremely difficult to find proper accommodation for the increased population brought to Bombay by the increase of commerce, and more particularly in consequence of the impulse that had been given by the construction of these railways. With regard to Nassick, there seemed to him, from comparing the observations which the author of the paper had made with what he had himself heard upon the subject, a certain amount of contradiction. In the first place, Mr. Campbell alluded to this district as being particularly well watered. It might be so; but the greatest complaint and the greatest difficulty which they had had to contend with in the construction of the railway from the top of the Ghauts into the valley of the Taptee had been the difficulty of supplying water even for the engines. In the next place, Mr. Campbell said Nassick was surrounded with meadows, rivers, rivulets, and canals; and yet he assumed that it must be a healthy position. Considering the climate of India, there seemed to him a certain amount of contradiction in that statement. However, that was a question which could be more accurately entertained and examined hereafter.

Sir ROBERT MONTGOMERY stated that Mr. Campbell, who was a personal friend of his, was one of their most able writers in India; yet, at the same time, he (Sir Robert) could not agree with the conclusions that he had come to as to the necessity of changing the capital from Calcutta. Was it necessary that a capital should be central? Looking to the different capitals of Europe—London, Paris, and St. Petersburg, were not central; nor was Washington, the capital of the United States of America. At Calcutta the Governor-General had other interests committed to him besides the government of Hindostan. He had charge of the affairs of Pegu and Penang, and although he was not directly charged with affairs in China, he was the chief medium of communication between England and that empire, and, in cases of difficulty, reference was made to him for advice and assistance. Therefore, with reference to China on the one hand, and Hindostan on the other, Calcutta did occupy a central position. Again, Calcutta was the centre of everything European in India. It was from thence our Indian empire began, and expanded. Our law courts, public offices, and great mercantile establishments were there. The great indigo-planters and tea-planters of the valley of the Ganges had their head-quarters in Calcutta. There were more Europeans in Calcutta than in the whole of the rest of Hindostan; Bombay and Madras included.

It was of great importance that public opinion should be brought to bear upon the government of India; and it was only in Calcutta that this could really be done, where there was a large European population and an ably-conducted press. Would there, then, be no loss of prestige in leaving Calcutta? A former Emperor of Delhi tried to remove his capital, and did not succeed. As regarded railways and telegraphs, he should himself consider that the construction of these would do away with the necessity of removing from Calcutta. A telegraph message from London would reach Calcutta and Bombay almost simultaneously, and despatches would reach Calcutta in perhaps twenty-four hours from Bombay. Again, he held that the Governor-General should not remain at the capital, except during the Legislative Session of four months or so, and that during the rest of the year he should be moving about India, going to Bombay, Madras, Birmah, and other parts of the empire; not with the state and ceremony and retinue of former times, but travelling by the railroad accompanied by a moderate staff of officers, and holding durbars, wherever it was necessary to produce an imposing effect upon the natives.

Sir CHARLES TREVELYAN said that the present question was in its essence political. The barest statement of the political question would indicate within narrow limits where the future capital ought to be. The political system of India was a system of local governments, and the part of the supreme government was to superintend and control the local administrations, to direct the resources of the empire to one common object, and to administer certain departments, such as the Post-office and Foreign Affairs, which were common to the whole. The capital ought not to be at the seat of any one of the local governments because it would interfere with the authority and diminish the responsibility of the local government. Sir Robert Montgomery had truly stated that the most wealthy and influential of our provinces was Bengal. It was full of resources, developing more rapidly than any other part of India; and the European element there was the strongest and growing the fastest. Yet, strange to say, this rich and powerful province was governed by a Lieutenant-Governor, unassisted by any Council, with secretaries with very inferior salaries; and the embarrassments which had attended the administration of the government of Bengal was in a great measure to be attributed to this weak and defective character of its government. If the Governor-General did not happen generally to reside at Calcutta, the necessity of giving to Bengal a fully constituted government on the footing of Madras and Bombay would be at once apparent. Another objection to the supreme government being placed at the seat of any one of the local governments was, that it would be unduly influenced by the experience and views of the province in which it was placed. While recognising to the full extent the important influence of public opinion, he contended that the European and Native opinion by which the supreme government should be influenced, ought not to be that of any particular province, but the opinion of the whole of India. Another objection to Calcutta, Bombay and Madras, was that they were situated on low land near the coast, in a hot relaxing climate, unfavourable to continuous vigorous mental exertion, and that they were on the extremities of the empire. The practical effect of these last objections was, that the Governor-Generals were absent half their time from Calcutta—formerly without their Councils, which led to great evils; and now the entire government is removed twice a year, at great expense and inconvenience, between places as distant from each other as London and Constantinople. If these premises were correct, the conclusion was inevitable that in determining the seat of the new government the *sine qua non* was that it should be central—so situated as to be in the easiest and most direct communication with all the local governments, so as to supervise them with the greatest possible effect and with the fullest possible knowledge of what was going on. Mr. Campbell had seen the great importance of this question, and

had carried us a long way towards the solution of it. But the site selected by him was not sufficiently central, and he had not fully considered the question of public opinion, that it should be the public opinion not of Calcutta or Bombay, but that of the whole of India. He (Sir C. Trevelyan) therefore thought the capital should be somewhere in the centre of the continent, on the line of the Great Indian Peninsula Railway. The question had not arrived at the stage which required that any particular spot should be fixed upon. We shall be better able to judge after the stream of railway travellers has passed for some time between Bombay and Calcutta, and after the Government has instituted inquiries on the subject. But if he were obliged to indicate the proper position, he should name the high, healthy table-land of Central India, where the new capital would have Calcutta on the right and Bombay on the left, and would be in direct railway communication with Madras, Allahabad, Agra, Lahore, and other important places. Hitherto our policy had been to cling to the sea-coast, as a kind of citadel, and our influence had only partially penetrated into the interior; but now that the results of the mutiny had established our supremacy in the minds of the natives, and they had entered upon a course of European education and European civilisation, we should not be afraid of placing the capital of India in the centre of the country. It would establish in the heart of India a new focus from which English and Christian influence would radiate. It would be a strongly-seated powerful English colony, and would thus be an additional security and would contribute to prolong our rule.

Sir ERSKINE PERRY said the question had been on the *tapis* for the last twenty or thirty years. The objections to Calcutta were obvious. It was very remote, it was in a bad climate for Europeans, it was a long way from those climates that suited Europeans, and the consequence was a severance of the government from the capital during many months of the year. Still, the question recurred, and had not yet been answered, where to fix on a better site. The problem to be solved was this: in choosing a site for the capital of India you have to suit two very different habitudes—the conquering race who belong to northern latitudes, and the conquered race who belong to the tropics. What suited one did not suit the other. Calcutta was an admirable place for the Bengalese; but it was very distasteful and disagreeable to the European community. Still all the great things in India had been done there. There Warren Hastings lived and built up our empire, and there for the last hundred years all the great men who belonged to that part of India have passed their lives in the employment of their country. The outcries against Calcutta had been, therefore, much exaggerated. On the other hand, when men were sent out from this country, of forty or fifty years of age, they found the climate extremely disagreeable, and they got away from it as soon as they could. He thought Mr. Campbell had been in some respects happy in the selection of a site. It was a central point, near to the sea, near to a large harbour and a large independent European community, and near to a range of hills where Europeans could find a suitable climate during the hot season, and have their residences there, just as many of the inhabitants of London had in the suburbs. The objection that occurred to him was that the plateau in question, like all the Deccan, is for the most part very barren. It is at an elevation of 2000 feet, with little rainfall, and therefore extremely dry: there are no rivers and no water to make the soil fertile. Mr. Campbell said that Nassik was full of springs, wells, orange-trees, and vines. That might be perfectly true; but these resources, which were sufficient for a limited population of a few thousand people, would not suffice for the population of the capital of British India. Moreover, all articles of food were 50 per cent. dearer in that part of India than in the fertile plains of Bengal. He was glad this question had been brought up in the Geographical Society, because it was desirable, as in most Indian ques-



tions, to turn the educated mind of England on topics of this description. As one who had passed his whole life in the consideration of Indian questions, he frequently regretted that this, the most magnificent appanage that ever belonged to any empire in the world, was so little understood, so little cared for, and so little thought of, by the inhabitants of England.

Sir HENRY RAWLINSON said it was impossible to exclude from the discussion all political considerations; but, at the same time, as members of the Geographical Society, it should be their endeavour to base their observations, as far as possible, on the geographical part of the question. Sir Erskine Perry had truly remarked that the whole question lay in a nutshell; it was a choice between Calcutta and somewhere else. Calcutta was in a very bad climate, it was in a corner of India, and it was the furthest removed from England of all the proposed sites. The importance of communication with England had not received sufficient attention. He did not mean telegraphic communication, but postal communication. Many of them might be aware that Bombay was in process of being made the postal port of India. It was the unanimous recommendation of a Committee of the House of Commons last year, and he believed arrangements to that effect were actually in the course of completion. This would make it almost a matter of necessity that the seat of the central government should be within a convenient distance of Bombay; and he agreed with Mr. Campbell that it should be some place above the Ghauts, in a good climate, and on the line of some great railway. But he was not prepared to desert a well-known station like Poonah in order to go eighty or ninety miles to the northward, and settle down in a desert like Nassick. We should lose prestige, and should lose, moreover, the advantage of all the necessary preparations for a capital which we have at Poonah. Ever since the battle of Kirkee, Poonah had been a great European settlement; it had gone on increasing from year to year, and it enjoyed at present a large amount both of English and native prestige. He should certainly vote in favour of Poonah in preference to Nassick. With regard to grapes, Poonah and the whole of the Deccan had its grapes equally with Nassick. In respect to climate, he did not think there was anything to choose between Poonah and Nassick. Sir Erskine Perry had observed that throughout the Deccan there was a difficulty of obtaining supplies. That objection would, no doubt, apply to all the proposed sites. But he did not see the necessity of the seat of government bringing a very large population around it. It was not the case at Washington, nor would it be the case here. There would be no commerce, like that of Bombay and Calcutta, nor any of those attractions for the native population which towns on the sea-coast presented. Therefore the question of supplies was not one of paramount importance. With regard to water, Poonah was better supplied than Nassick. There were two rivers which joined at Poonah, and furnished a supply of water amply sufficient for present necessities; while with dams and reservoirs the supply might be doubled or trebled. Then, in the vicinity were the hill forts of Singhar and Poorundhar, within a few miles of the cantonment, and possessing the best climate throughout the whole of the Deccan, much better, indeed, suited for European constitutions than the hills about Nassick. He knew Nassick only as a sportsman; he had never resided there, nor had he seen any sanitary reports of it. But he had heard that the jungles in the vicinity were unhealthy, whereas Poonah and its neighbourhood were notoriously healthy.

---